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REFERENCE

COAST GUARD BULLETIN

ISSUED MONTHLY

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TO INAUGURATE WAR BOND CAMPAIGN AMONG MILITARY PERSONNEL OF COAST GUARD

Civilian personnel of Navy shore establishments throughout the country having attained the "90 and 10" goal in the purchase of War Bonds, the Navy is now about to launch a campaign among military personnel for the purchase of these bonds through regular military allotments. This campaign will be conducted throughout the entire Navy, Coast Guard, and Marine Corps.

The issuance of bonds to military personnel already having allotments for the purpose, which in the past has been handled by the Treasury Department, will be taken over by the Navy and Coast Guard. A Navy War Bond Issuing Agency has been recently established in Cleveland, Ohio, as a part of the field branch of the Bureau of Supplies and Accounts. This office will handle the issuing of all bonds for military personnel of the Navy and the Marine Corps. Bonds for military personnel of the Coast Guard will be issued by Coast Guard Headquarters at Washington, D. C.

During the campaign, it will be emphasized that War Bonds are the safest investment in the world, that their systematic and regular purchase will provide security in the uncertain period of readjustment after the war, that the War Savings Bond program, is a vital and collateral part of the war effort, and that the Government actually needs funds for the purchase of war materials.

Instructions outlining the procedure necessary for the registration of an allotment, and a handbook setting forth the most successful methods of conducting a bond campaign, will soon be forwarded to all ships and stations of the Navy and Coast Guard.

The inauguration of the bond campaign among Naval, Coast Guard, and Marine Corps military personnel will not result in any slackening of the drive for the enrollment of civilian personnel in the pay-roll savings plan of bond purchasing. Shore activities, which have not yet reached the "90 and 10" goal will continue to make every effort to attain that goal as speedily as possible.

COAST GUARDSMEN ARE NOW ELIGIBLE FOR PURPLE HEART DECORATION

For the first time in the century and a half of Coast Guard history, a member of the Service has been awarded the Purple Heart, a decoration which has been, until recently, a traditional Army award. Chief Boatswain's Mate Lloyd M. Morris, was presented with the medal by Vice Admiral R. R. Waesche, Commandant of the Coast Guard, who, by direction of Secretary of the Navy Frank Knox, acted in the name of President Roosevelt.

The official citation with Morris' award read: "This decoration is in recognition of the wounds which you received in action when strafed with machine-gun fire from an enemy plane while you were landing with the ship's beach party on November 8, 1942, at Fedala, French Morocco."

The decoration known as the Purple Heart was established by General George Washington while his Revolutionary army was at Newburgh, N. Y., upon the Hudson River.

Following is part of the order issued by him on August 7, 1782:

"The General, ever desirous to cherish a virtuous ambition in his soldiers, as well as to foster and encourage every species of military merit, directs that whenever any singularly meritorious

[1] Published with the approval of the Director of the Budget.

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action is performed, the author of it shall be permitted to wear on his facings, over his left breast, the figure of a heart in purple cloth, or silk, edged with narrow lace or binding. Not only instances of unusual gallantry but also of extraordinary fidelity and essential service in any way shall meet with due reward. * * *"

Following the Revolutionary War, the Purple Heart award seems simply to have been forgotten, as at the time of the Civil War the Medal of Honor was established to serve a similar purpose.

The Purple Heart award was revived by order of President Hoover on February 22, 1932, on the birthday of and in honor of George Washington. First recipient of the revived decoration was General Douglas MacArthur, who received the award on that date. It was awarded upon request to those men who were in the United States Army during the first World War and who had received meritorious service citation certificates.

This award from its inception was considered as an Army decoration, and not until 1943 was it specifically prescribed for the use of all the military services. By Executive Order 9277, dated December 3, 1942, and General Order No. 186, dated January 21, 1943, the decoration was awarded to: Persons wounded in action against the enemy of the United States while serving with the Navy, Marine Corps, or Coast Guard of the United States, or as a result of act of such enemy, if wound necessitated treatment by medical officer. It is awarded for combat action only.

Under present practice the Purple Heart is being awarded much as were the wound stripes of the last World War.

EMPLOYEES OF CONTRACTOR MAKE PRESENTATIONS TO TRAINING STATIONS

An indication of the excellent spirit of cooperation between the contractor, his employees, and the Coast Guard during the construction of the Manhattan Beach and Sheepshead Bay training stations, South Brooklyn, N. Y., which have recently been completed, was the presentation of a fully equipped ambulance and a pipe organ for the use of these stations. Funds for the purchase of the gifts were collected by the employees who were engaged in the actual construction of the projects.

The ambulance, which will be used by both the Manhattan Beach Training Station of the Coast Guard and the Sheepshead Bay Training Station of the War Shipping Administration, was presented to the stations by those employees who were engaged in the construction of Section 3 of the project which consisted of a large portion of the Sheepshead Bay station. It was accepted on behalf of the stations by Capt. G. U. Stewart, commanding officer of the Manhattan Beach Training Station, at ceremonies the focal point of which was a full-dress parade of that station's personnel. This vehicle is a Packard 120 chassis on which is mounted a Henney body complete with all customary equipment.

The Hammond organ, which has been installed in the auditorium of the Manhattan Beach station, was presented to that station by the employees of Section 1 of the project, which comprised the Manhattan Beach station. It was accepted at ceremonies in which the new auditorium was dedicated. Included as part of this gift were a stage backdrop, additional valance, a solovox, a spotlight, microphone, and amplifiers.

VOLUNTEER PORT SECURITY FORCE TO BE AUGMENTED BY WOMEN ENROLLEES

Women are now being admitted to the ranks of the Volunteer Port Security Force of the U. S. Coast Guard, an organization of volunteers who guard important water-front facilities in their spare time, under the supervision of the Captain of the Port organization. The function of the women in this security force will be to take care of the clerical affairs of the various regimental headquarters of the volunteer forces, to transport the men to their stations in their own cars, and to feed the men while they are on duty.

Mrs. William J. Clothier, of Valley Forge, Pa., will head the women's unit and has been commissioned as a temporary member of the Coast Guard Reserve with the rank of lieutenant. Mrs. Clothier is well qualified to serve as head of the new unit, for, as the only woman member of the Pennsylvania Council of Defense, she supervised the activities of 150,000 women volunteers in Civilian Defense. During World War I, she was one of the founders of the Emergency Aid in Philadelphia and has served since as its head.

Women volunteers, enrolled in the unit to serve in their spare time, will wear uniforms and submit to military discipline while on duty but will receive no pay. Their uniforms will be different from those of the Women's Reserve of the Coast Guard, the SPARS, and are now being designed.

The specific duties of members of the Volunteer Port Security Force are to perform guard duty at the docks and piers to which assigned. Standing regular watches, in uniform, and with arms, they enforce all regulations covering ingress and egress. They examine passes and permits and prevent the passage of all unauthorized persons. They maintain a constant watch for fires, and enforce all regulations safeguarding against these.

Over and above these obvious duties, volunteers, as the result of their special training, are constantly on the alert for conditions conducive to fire or sabotage. They watch for the signs of tampering, malicious mischief, and any indication of actions or conditions likely to impair the efficiency of the facilities under their care.

To give the volunteers the special training required, schools are being organized. The first of these, to be known as the U. S. Coast Guard Volunteer Training Institute, has been established in the Law School of the University of Pennsylvania at Philadelphia, Pa. The course of training at this school will include a series of lectures, detailed instruction in port security work, and small arms practice.

Executive director of the institute will be Amos J. Peaslee of Clarksboro, N. J., an expert on sabotage and espionage techniques. Mr. Peaslee was chief counsel in the successful prosecution of the suit brought against the German Government for damages caused by the famous Black Tom and Kingsland explosions, during World War I. He has been commissioned a commander in the Coast Guard Temporary Reserve.

COAST GUARD ENSIGN NOW NEARLY 150 YEARS OLD

The familiar ensign flown from all Coast Guard cutters, as the distinguishing mark of the Service and as a badge of authority, has back of it nearly 150 years of history and tradition. While minor changes in the design have been made within that period, the flag is essentially the same as that used in the early days of the Republic.

The Coast Guard ensign, or as it was first called, the Revenue Flag of the United States, was created by an act of Congress approved March 2, 1799, 9 years after the establishment of the original Revenue Marine, which reads as follows:

SECTION 102. And be it further enacted, That the cutters and boats employed in the service of the revenue shall be distinguished from other vessels by an ensign and pendant, with such marks thereon as shall be prescribed and directed by the President of the United States; and in case any ship or vessel liable to seizure or examination shall not bring to, on being required, or being chased by any cutter or boat having displayed the pendant and ensign prescribed for vessels in the revenue service, it shall be lawful for the captain, master or other person having command of such cutter or boat to fire at or into such vessel which shall not bring to, after such pendant and ensign shall be hoisted, and a gun shall have been fired by such cutter or boat as a signal, and such captain, master, or other person as aforesaid, and all persons acting by or under his direction, shall be indemnified from any penalties or actions for damages for so doing; and if any person shall be killed or wounded by such firing, and the captain, or master or other person aforesaid shall be prosecuted and arrested therefor, such captain, master, or other person shall be forthwith admitted to bail. * * *"

This is the basic act establishing the authority of the officers and vessels of the present Coast Guard. In accordance with this act, the Secretary of the Treasury, Oliver Wolcott, on August 1, 1799, prescribed the revenue flag as follows:

The ensign and pendant directed by the President under the Act of 2d of March, 1799, consists of sixteen perpendicular stripes alternate red and white, the union of the ensign bearing the arms of the United States in dark blue on a white field.

This picturesque flag was arranged with historical detail, inasmuch as in the union of the flag there are 13 stars, 13 leaves to the olive branch, 13 arrows, and 13 bars to the shield, all corresponding to the number of States constituting the Union at the time of the founding of the Republic. The 16 vertical stripes in the body of the flag are symbolical of the number of states composing the Union when this flag was officially adopted.

Originally intended to be flown only from revenue cutters and boats connected with the Customs Service, in the passage of time there grew up a practice of flying this flag from certain customhouses, and eventually, by direction of the Secretary of the Treasury in 1874, it was flown from all customhouses. From then until 1910, it was flown indiscriminately on customhouses, customs boats, and revenue cutters.

President Taft, by Executive order of June 7, 1910, prescribed that the flag flown by the vessels of the Revenue Cutter Service be marked with the distinctive emblem of that Service. This emblem, in blue and white, was to be placed on a line with the lower edge of the union, and over the center of the seventh vertical red stripe from the mast of said flag, the emblem to cover a horizontal space of three stripes.

It appears that for several years no exact description of the "distinctive emblem of the Revenue Cutter Service," was available, and that a certain lack of uniformity in flag designs gradually developed.

On February 26, 1927, the Hon. Andrew W. Mellon, Secretary of the Treasury, approved and prescribed the distinctive seal and emblem of the Coast Guard. This was the present shield of 13 stripes superimposed and centered upon two old-fashioned anchors crossed so that the shanks are at an angle of 90° with each other. On a circular band surrounding the shield is the wording "United States Coast Guard, 1790." Inside this band and above and below the shield respectively, are the words "Semper Paratus" (motto of the Coast Guard).

The details of this order corrected certain minor details and authenticated the wording "United States Coast Guard" a change made necessary by the consolidation of the Revenue Cutter Service and the Life Saving Service to form the Coast Guard in 1915.

COAST GUARD TO ISSUE INSTRUCTIONAL PAMPHLETS ON NAVIGATIONAL AIDS

A new instructional pamphlet entitled "The Significance of Aids to Marine Navigation," and intended for the use of training stations and classes in the elements of boat handling and navigation, is about to be issued by Headquarters. This pamphlet, companion to the publication entitled "Buoys in Waters of the United States," will describe in simple language the significance of lighthouses, lightships, radiobeacons, fog signals, buoys, and beacons.

As the new publication is intended solely for training purposes, the text is restricted to information regarding the actual use of the aids described in navigation. Engineering matters have not been discussed, beyond those features which assist in the identification of the various aids.

The chapter on lighthouses describes the coloring of the exteriors of such structures, telling how this color is used to distinguish one lighthouse from another. The flashing and other characteristics of the lights are explained, and the use of the light lists in identifying the navigational aids detailed. Fog signals, radiobeacons, buoys, and other aids are treated in much the same manner, with emphasis being placed upon the proper and constant use of charts and other official publications.

The new pamphlet is illustrated by several black and white drawings, and by a color plate showing the marking of the Intracoastal Waterway. Broken up into short chapters, the text is adaptable to classroom work. To have approximately 32 pages, the pamphlet will be available for distribution without charge.

CUTTER CAMPBELL SINKS AXIS SUBMARINE; DEPTH CHARGES FIVE OTHERS

While operating as a convoy escort in the North Atlantic recently, one German submarine was sunk by ramming and by gunfire, and five other submarines were attacked with depth charges, by the Coast Guard Cutter *Campbell*. The sinking was the last of a series of encounters all taking place within 12 hours.

Having left the convoy to investigate the suspected pressure of a submarine pack, the *Campbell* was returning when it encountered the enemy submarines on the surface. During the encounter which resulted in a sinking, the *Campbell* opened fire on the submarine with her guns, and laid a course to ram the other vessel. A glancing blow was struck, and as the submarine drifted free, gunfire was resumed at point blank range, from which the submarine slowly settled by the stern and sank.

As a result of the collision, a hole was torn in the cutter's side and her engine room was flooded, putting the craft out of commission. It has since been towed to an Atlantic port for repairs.

MERCHANT MARINE INSPECTION ACTIVITIES

AMENDMENTS TO SUBCHAPTER O—REGULATIONS APPLICABLE TO CERTAIN VESSELS AND SHIPPING DURING EMERGENCY

The following amendments to Subchapter O were published in the Federal Register, dated March 2, 1943.

PART 153—BOATS, RAFTS, AND LIFESAVING APPLIANCES; REGULATIONS DURING EMERGENCY

Section 153.4a, reading as follows, is added to Part 153:

153.4a *Construction of life floats.*—During the emergency, life floats installed after March 31, 1943, on all vessels operating on ocean or coastwise waters shall comply with the following requirements:

(*a*) *General provisions; approval.*—(1) The standard specifications for balsa wood life floats are set forth in paragraph (*d*) to enable manufacturers to produce equipment which fully meets the approval requirements by strict adherence to all details of the standard specification.

(2) Manufacturers who desire to manufacture life floats shall submit fully dimensioned drawings and material specifications in quadruplicate in order that they may be considered for approval. After the plans and specifications have been examined and any necessary adjustments made, strength, freeboard, and capacity tests shall be conducted in accordance with paragraph (*b*).

(*b*) *General characteristics of life floats.*—Every life float shall conform to the following general requirements:

(1) Construction, materials, and workmanship shall at least be equivalent to that of the standard type.

(2) It shall be effective and stable floating either side up.

(3) It shall have a life line securely becketed around the outside of the life float, festooned in bights approximately 3 feet in length, with a seine float in each bight, and extra life lines or pendants shall be fitted approximately 18 inches apart.

(4) It shall be of such strength that it can be launched or dropped from a height of 60 feet into the water flat, sidewise, and endwise without damage to the body, or other damage affecting the serviceability of the float for the purpose intended.

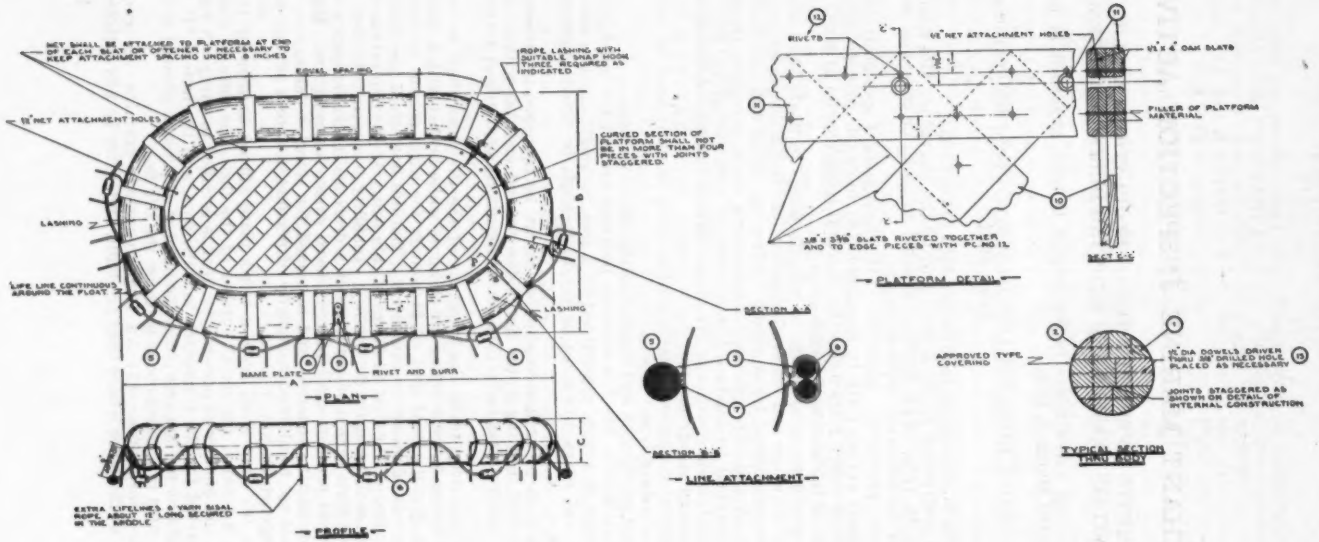
(5) After the drop tests, the buoyancy of the life float shall be determined, and then be tested in fresh water for 48 hours while loaded with a weight giving a downward gravitational pull of 40 pounds for each person of capacity, the weight being out of water, or equivalent. The life float shall be reversed in the water at the end of the first 24 hours of this test. At the expiration of the test the buoyancy shall be again determined. Inability to support the test weight of 40 pounds for each person of capacity, or a decrease in the buoyancy of the life float of over 10 percent, shall be considered cause for rejection. Rigging and canvas cover may be removed and inspected for interior damage.

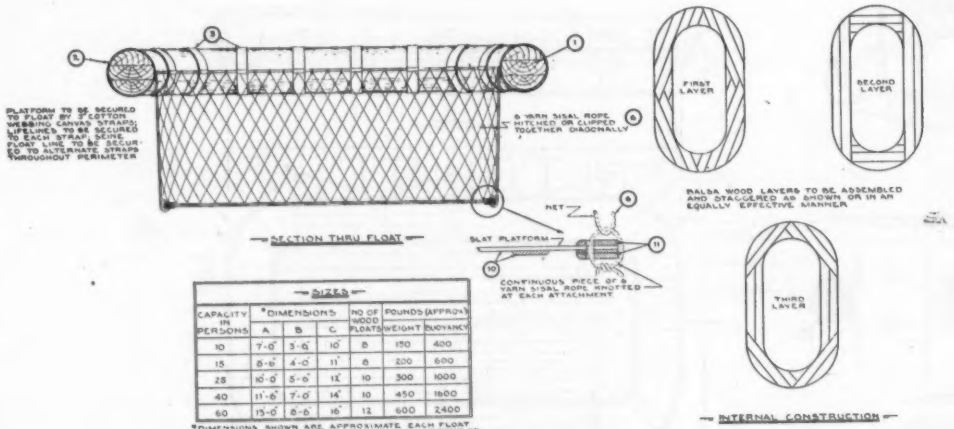
(6) It shall not be allowed a capacity of persons in excess of that established by actual demonstration.

(7) Every life float shall have a brass plate affixed thereon by the builder and bearing his name, the serial number of the float, the date of construction, dimensions, and number of persons the float is certified to carry. A blank space shall be provided for the inspector's initials, port, and the letters "U. S. C. G."

(8) In addition to the name plate, the number of persons allowed to be carried shall be stenciled in a conspicuous place on the life float.

(*c*) *Factory inspection.*—(1) An inspector shall examine the construction of life floats at the place where they are built, and, after he has satisfied himself


NET SHALL BE ATTACHED TO PLATFORM AT END OF EACH SEAT OR OFTENER IF NECESSARY TO KEEP ATTACHMENT SPACING UNDER 8 INCHES
EQUAL SPACING
ROPE LASHING WITH SUITABLE SNAP HOOK THREE REQUIRED AS INDICATED
CURVED SECTION OF PLATFORM SHALL NOT BE IN MORE THAN FOUR PIECES WITH JOINTS STAGGERED.
LASHING
LIFE LINE CONTINUOUS AROUND THE FLOAT
LASHING
NAME PLATE
RIVET AND BURR
PLAN
EXTRA LIFELINES 6 YARN SISAL ROPE, ABOUT 12' LONG SECURED ON THE BRIDLE
PROFILE
SECTION X-X
SECTION Y-Y
LINE ATTACHMENT
RIVETS
NET ATTACHMENT HOLES
1½" x 4" OAK SLATS
FILLER OF PLATFORM MATERIAL
3/8" x 3½" SLATS RIVETED TOGETHER AND TO EDGE PIECES WITH PC NO 12.
SECT Z-Z
PLATFORM DETAIL
APPROVED TYPE COVERING
½" DIA DOWELS DRIVEN THRU 5/8" DRILLED HOLE PLACED AS NECESSARY
JOINTS STAGGERED AS SHOWN OR DETAIL OF INTERNAL CONSTRUCTION
TYPICAL SECTION
SMALL BUOY


PLATFORM TO BE SECURED TO FLOAT BY 3" COTTON WEBBING CANVAS STRAPS; LIFELINES TO BE SECURED TO EACH STRAP. ALTERNATE STRAPS FLOAT LINES TO BE SECURED TO ALTERNATE STRAPS THROUGHOUT PERIMETER
9 YARN SISAL ROPE HITCHED OR CLIPPED TOGETHER DIAGONALLY
NET
SLAT PLATFORM
CONTINUOUS PIECE OF 9 YARN SISAL ROPE KNOTTED AT EACH ATTACHMENT
FIRST LAYER
SECOND LAYER
THIRD LAYER
BALSA WOOD LAYERS TO BE ASSEMBLED AND STAGGERED AS SHOWN OR IN AN EQUALLY EFFECTIVE MANNER

— SECTION THRU FLOAT —

— INTERNAL CONSTRUCTION —

— SIZES —

CAPACITY IN PERSONS	*DIMENSIONS A	B	C	NO OF WOOD FLOATS	POUNDS (APPROX) WEIGHT	BUOYANCY
10	7'-0"	3'-6"	10"	8	150	400
15	8'-6"	4'-0"	11"	8	200	600
25	10'-0"	5'-0"	12"	10	300	1000
40	11'-6"	7'-0"	14"	10	450	1600
60	13'-0"	8'-6"	16"	12	600	2400

*DIMENSIONS SHOWN ARE APPROXIMATE. EACH FLOAT TO PROVIDE NET GRAVITATIONAL BUOYANT SUPPORT OF 40 POUNDS PER PERSON CAPACITY

— GENERAL NOTES —

1. MATERIAL FOR SLATS (PC 10) SHALL BE GRADE "A" WESTERN RED, ALASKA OR PORT ORFORD CEDAR, SITKA SPRUCE, OR NORTHERN WHITE PINE; OR FIRST GRADE PHILIPPINE MAHOGANY, OR SOUTHERN CYPRESS.
2. DIMENSIONS IN ALL CASES APPLY TO BARE BALSA RATHER THAN TO OUTSIDE COVERING.

PC NO	NAME	NO PCS	MATERIAL	REMARKS
13	WL DOWELS	AS REQD	WHITE PINE	BIRCH OR EQUAL
12	PLATFORM RIVETS	-	COPPER	LENGTH TO SUIT
11	PLATFORM EDGE	-	OAK	
10	PLATFORM SLAT	AS REQD		SEE NOTE NO 1
9	RIVET AND BURR	4	BRASS	FOR PC NO 8
8	NAME PLATE	1	BRASS	
7	STRAP LACING	AS REQD	LINEN THREAD	NO 18/3 WAXED
6	LIFE LINE & NET	"	SISAL	3/4" DIA 4.5 YARN
5	NET LINE	"	SISAL	1/2" DIA 9.21 YARN
4	WOOD FLOATS	"		8" DIA X 4' LONG
3	STRAPS	"	COTTON	3" WIDE WEBBING
2	COVERING	"		APPROVED TYPE
1	FLOAT		BALSA WOOD	SEE SPEC

QUANTITY FOR ONE FLOAT

SCHEDULE OF MATERIAL

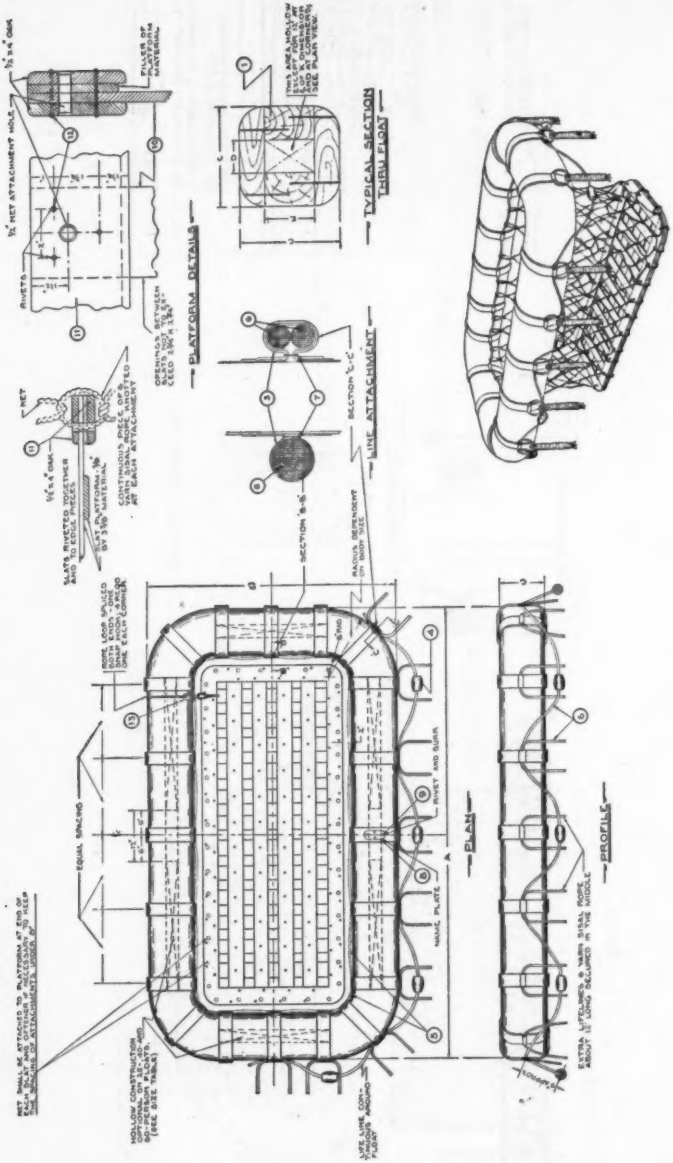
MERCHANT MARINE INSPECTION
U.S. COAST GUARD

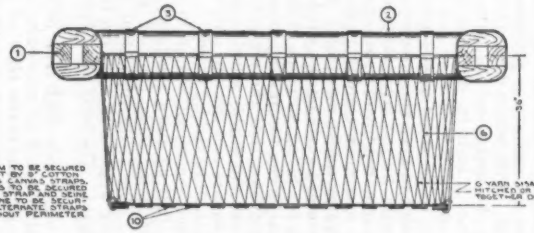
APPROVED TYPE ELLIPTICAL BALSA WOOD LIFE FLOAT WITH PLATFORM-NET-RIGGING

DWG NO ELF-1 FIG. 1

DATE 13 NOV 1942
C.H. BARNES

FIGURE 1.


PLATFORM DETAILS
TYPICAL SECTION THRU FLOAT
LINE ATTACHMENT
PLAN
PROFILE
EQUAL SPACING
RIVET AND BURR
NAVAL PLATE
SECTION A-A
SECTION B-B
SECTION C-C
RADIUS DEPENDENT ON SIZE FLOAT
NET SHALL BE ATTACHED TO PLATFORM AT END OF EACH BAY AND AT EACH ALTERNATE BAY ON SIDE
HOLLOW CONSTRUCTION OPTIONAL ON SIZES 000 THROUGH 3 (SEE TABLE)
LIFE LINE CONTINUOUS AROUND FLOAT
EXTRA LIFELINES, 3 MAIN SIGNAL ROPE ABOUT 12' LONG SECURED IN THE MIDDLE
NET
RIVETS
OPENINGS BETWEEN RIVETS NOT TO EXCEED 1 3/16" X 1 3/16"
CONTINUOUS PIECE OF 1/4" SIGNAL ROPE SPLICED AT EACH ATTACHMENT
RIVETS OF SAME MATERIAL AS PLATE
THIS AREA HOLLOW (USE OF FOAM RUBBER OR SIMILAR MATERIAL ADVISED AT CORNERS)
1/2" NET ATTACHMENT HOLES
1/2" x 4" DIA.
3/16" MATERIAL
ROPE LOOP SPLICED OVER EACH 3 PIECES ONE EACH CORNER


PLATFORM TO BE SECURED TO FLOAT BY 3" COTTON WEBBING CANVAS STRAPS. LIFELINES TO BE SECURED TO EACH STRAP AND SEINE FLOAT LINE TO BE SECURED TO ALTERNATE STRAPS THROUGHOUT PERIMETER
6 YARN SISAL ROPE HITCHED OR CLIPPED TOGETHER DIAGONALLY
SECTION THRU FLOAT

* DIMENSIONS SHOWN ARE APPROXIMATE. EACH FLOAT IS TO PROVIDE A NET GRAVITATIONAL BUOYANT SUPPORT OF 40 POUNDS PER PERSON CAPACITY

SIZES

CAPACITY IN PERSONS	*DIMENSIONS					NO OF WOOD FLOATS	APPROX-POUNDS	
	A	B	C	D	E		WEIGHT	BUOYANCY
10	7'-0"	3'-2"	8"	SOLID		10	150	400
15	7'-0"	4'-0"	10"	SOLID		10	200	600
25	9'-0"	5'-1"	11½"	3½"	5½"	12	300	1000
40	10'-6"	6'-2"	13"	5"	5"	12	450	1500
60	12'-0"	7'-7"	15"	5⅞"	5⅞"	14	700	2400

GENERAL NOTES

1. MATERIAL FOR SLATS (PC NO 101) SHALL BE GRADE 'A' WESTERN RED, ALASKA, PORT ORFORD CEDAR, SITKA SPRUCE, NORTHERN WHITE PINE, FIRST GRADE PHILIPPINE MAHOGANY, OR SOUTHERN CYPRESS.
2. DIMENSIONS IN ALL CASES APPLY TO BARE BALSA RATHER THAN OUTSIDE OF COVERING

FIGURE 2.

13	SNAP HOOK	4	STEEL	GALVANIZED
12	PLATFORM RIVETS	AS REQD	COPPER	LENGTH TO SUIT
11	PLATFORM EDGE		OAK	
10	PLATFORM SLAT	AS REQD	OAK	
9	RIVET AND BURR	4	BRASS	SEE NOTE NO 1
8	NAMEPLATE	1	BRASS	FOR PC NO 8
7	STRAP LACING	AS REQD	LINEN THREAD	NO 16/3 WAXED
6	LIFE LINE AND NET	"	SISAL	1¼" DIA X 6 YARN
5	NET LINE	"	SISAL	1½" DIA X 21 YARN
4	WOOD FLOATS	"		22½" DIA X 4" LONG
3	STRAPS	"	COTTON	3" WIDE, WEBBING
2	COVERING	"		APPROVED TYPE
1	FLOAT	1	BALSA WOOD	SEE SPEC.
PC NO	NAME	NO REQ'D	MATERIAL	REMARKS
QUANTITY FOR ONE FLOAT				

SCHEDULE OF MATERIAL

MERCHANT MARINE INSPECTION
U. S. COAST GUARD

APPROVED TYPE RECTANGULAR BALSA WOOD LIFE FLOAT WITH PLATFORM-NET-RIGGING

DWG. NO. RLF-1 DATE: 9 SEPT 1943 L.H. BARNES

FIG. 2.

that they are constructed in accordance with the approved plans and specifications, he shall stamp the initials of his name, port, and the letters "U. S. C. G." on a blank space on the name plate, and this stamp shall be satisfactory evidence that the life float has been constructed in accordance with said plans and specifications.

(2) One float of each size and type manufactured shall be selected at random from each group of approximately 30 and drop-tested from a height of 60 feet. The first one selected from the first group is to be drop-tested flat, the one selected from the second group is to be drop-tested sidewise, and the one selected from the third group is to be drop-tested endwise, so that out of 90 floats manufactured, three floats will have been drop-tested from a height of 60 feet, one flat, one endwise, and one sidewise. After the drop test, the float shall be subjected to a buoyancy test of 40 pounds downward gravitational pull for each person of capacity.

(3) Reports concerning each test shall be forwarded to Headquarters and shall include the name of the inspector who conducted the test, the number stamped on the float tested, date and location of test, together with pertinent details of results.

(*d*) *Standard type balsa wood life floats.*—(1) *Types and capacities.*—Balsa wood life floats shall be of the elliptical or rectangular types, as illustrated by figure 1 and figure 2, respectively, and shall be furnished in 10, 15, 25, 40, or 60 person capacities.

(2) *Balsa wood.*—Balsa wood shall be of the genus Ochroma; weight not more than 12 pounds nor less than 8½ pounds per cubic foot when thoroughly dry; thickness, 2 inches and over, to average not less than 2½ inches, with not more than 50 percent of 2 inches thickness admitted; width, 3 inches and over, to average not less than 5 inches; length, 3 feet and over, to average not less than 5 feet, with not more than 40 percent of 3-foot lengths admitted. It shall be sound, square edge, kiln dried to a moisture content not exceeding 12 percent, and shall be free from rot, dote, large or unsound knots, wormholes, and other injurious defects; except that one sound, tight knot, not over 1¼ inches in diameter and 150 scattered pin wormholes or their equivalent, will be allowed in every 5 square feet, surface measure, provided the pin wormholes do not exceed 1/32 inch in diameter and that there shall be no concentrations of more than 40 pin wormholes in any square foot of surface area. Pith which does not exceed 1 inch in diameter and which does not appear on the surface of the piece shall not be considered a defect. Boxed pith less than 1 inch in diameter shall not be considered a defect.

(3) *Joint and seam arrangement.*—The balsa wood pieces composing each layer shall be as large as practicable in order to keep the number of pieces and the number of seams and butts to a minimum, but no layer shall be less than 2 inches in thickness. The pieces shall be so arranged in adjacent layers that butts and seams are staggered in order to give maximum rigidity to the whole and to minimize all channels through which water might penetrate. The grain of the wood shall be so laid as to give minimum end grain on the outside surface of the finished body. The use of small pieces for filling purposes in the interior of the body is prohibited. The use of small pieces for fairing purposes on the exterior of the body will be permitted, provided that the grain complies with the above requirement and that the pieces are thoroughly glued in place as hereinafter specified. All butted ends shall be square and smooth. All sides shall be smooth and straight. All butts and seams shall be tightly fitted.

(4) *Gluing.*—Before assembling the various pieces, all end grain of each piece which will form part of a butt or seam shall be given a copious coat of urea formaldehyde or phenol resin waterproof glue. This coat of glue shall be allowed to dry before assembly proceeds. The parts then shall be assembled with a copious coat of the waterproof glue applied to each mating surface of each piece which forms part of a butt or seam. The body shall then be clamped until the glue is dry.

(5) *Doweling and smooth finish.*—The rough body shall then be worked down to its approximate final form and then be doweled as necessary to thoroughly secure all pieces. Dowels shall extend through the entire body of the life float. They shall be of white pine, birch, douglas fir, or equal, ½-inch diameter, and be driven through a ⅜-inch diameter bored hole. Before driving a dowel, the dowel and its hole for the entire length shall be thoroughly coated with waterproof glue. After the glue has dried, the body shall be worked down to its final

form. It shall be as smooth as practicable. If any gaps are found to exist in butts or seams, they shall be filled with shims glued in. The entire exterior of the body shall then be given a coat of waterproof glue, which shall be allowed to dry.

(6) *Muslin wrapping.*—The body shall then be tightly wound with a continuous band of unbleached muslin, 4⅞ ounces per square yard. This band shall be about 8 inches wide and shall be applied with an overlap of one-half its width, so that the final covering is two layers thick. As it is applied, the body shall be given a coat of waterproof glue, and care shall be taken that the glue thoroughly penetrates the muslin. After the wrapping is completed, the life float shall be again coated with two coats of water-resisting spar varnish. Alternate methods of treating and covering the exterior surface will be considered if the methods have been found satisfactory.

(7) *Intent of subparagraphs (2) to (6), inclusive.*—The intent of the foregoing is to produce a compact monolithic structure without channels or opening through which water may penetrate the interior, and that it shall not only be waterproof at its exterior surface without the aid of further covering but that each piece of which it is constructed shall be a unit which will localize within itself any absorption due to exterior damage. Every effort shall be directed to this result during construction.

(8) *Covering.*—The body shall be covered with a spirally wound covering of No. 10 cotton canvas having a width of 8 inches wrapped in waterproof glue with an overlap of 4 inches on each wrap. The canvas cover shall be given one coat of light gray canvas preservative paint.

(9) *Straps.*—The straps shall be 3-inch cotton tape or webbing having a breaking (tensile) strength of not less than 750 pounds for the 10- and 15-person sizes, and not less than 1,500 pounds for the 25-, 40-, and 60-person sizes.

(10) *Thread.*—All thread used in the construction of life floats shall be No. 16, 3-cord linen or No. 10, 6-cord, glazed finish, heavy cotton thread.

(11) *Platform, net, and rigging.*—The platform, netting, and rigging shall be in general accordance with figure 1 or 2. Care shall be taken that the platform and netting will readily pass through the life float when it is launched, regardless of which side of the life float strikes the water. All parts of the platform, including surfaces, edges, and rivets, shall be smooth and present no cutting edges, points, or splinters which might be dangerous to a barefooted person. The platform shall be finished in natural wood and painted with two coats of water-resisting spar varnish.

(12) *Life line and pendants.*—The life line around the life float shall be festooned in bights not longer than 3 feet with a seine float in each bight. The extra life lines or pendants shall be fitted approximately 18 inches apart.

(13) *Marking.*—Each life float shall be fitted with a name plate in accordance with paragraph (*b*) (7) and be stenciled with the number of persons allowed in accordance with paragraph (*b*) (8).

Section 153.10 is amended by changing the introductory paragraph to read as follows, and by the addition of a new paragraph (*c*) to read as follows:

153.10 *Construction of life preservers.*—The following provisions are, during the emergency, applicable as alternative details of construction for life preservers to those provided in §§ 28.4–1 to 28.4–10, inclusive, 37.6–1 to 37.6–7, inclusive, 59.55, 60.48, 76.52, 94.52, and 113.44 of this chapter:

* * * * * * *

(*c*) *Kapok.*—The kapok shall be raw, having the physical qualities of that grown in Java. This definition shall include vegetable fibers having properties similar to Java kapok. The kapok shall contain less than 5 percent by weight, of sticks, seeds, dirt, or other foreign matter, and shall be free from objectionable odor and from adulteration with other fiber. The kapok, after first having been submerged 12 inches deep in fresh water for 48 hours, shall have a buoyancy in fresh water of at least 51 pounds per cubic foot when compressed to a density of 3 pounds per cubic foot.

CORRECTION

Section 153.6 (*s*) *fishing kits* given in the February 1943 Coast Guard Bulletin, page 107, is corrected by changing the fourth entry under "1 package containing the following items" to read "1 No. 3/0 O'Shaughnessy hook, attached to 6 inches of No. 9 stainless steel wire, other end attached to a No. 5 barrel swivel."

EQUIPMENT APPROVED BY THE COMMANDANT

The following items of equipment for the better security of life at sea have been approved by the Commandant, United States Coast Guard, and published in the Federal Register, dated March 2, 1943:

Lifeboats.

Neptune Boat & Davit Co., Inc., New Orleans, La., 20' 0" x 6' 0" x 2' 6" metallic lifeboat (180 cu. ft.) (drawing No. NL-18-12-P, dated Oct. 30, 1942); 16' 0" x 5' 6" x 2' 4½" metallic lifeboat (125 cu. ft.) (drawing No. L. B. 125, rev. Dec. 12, 1942).

Welin Davit & Boat Corporation, Perth Amboy, N. J., 28'0" x 9'9½" x 4'1½" metallic motor-propelled lifeboat (680 cu. ft.) (drawing 2413).

Lifeboat skates.

R. C. Cowles, Baltimore, Md., skates for lifeboats (drawing Nos. 143 and 143A, dated Jan. 1943.)

Davits.

Welin Davit & Boat Corporation, Perth Amboy, N. J., Welin-Maclachlan gravity davit, type 48/21 (drawing No. 2397, dated Oct. 6, 1942) (maximum working load of 10,500 pounds per arm, of which 3,348 pounds is allowed on nesting bracket); Welin-Machlachlan gravity davit, type 40/19 (drawing No. 2412, dated Oct. 6, 1942) (maximum working load of 9,040 pounds per arm, of which 4,018 pounds is allowed on nesting bracket).

Life floats.

C. C. Galbraith & Son, Inc., New York, N. Y., 10-, 15-, 25-, 40-, and 60-person elliptical balsa wood life floats (drawing No. G-298, dated Nov. 25, 1942).

Lifeboat bilge pump.

Welin Davit & Boat Corporation, Perth Amboy, N. J., lifeboat bilge pump (drawing No. 2403, dated Oct. 13, 1942).

Lifesaving nets.

American Chain Ladder Co., Inc., New York, N. Y., steel lifesaving net (drawing No. M-310, dated Feb. 3, 1943).

H. K. Metalcraft Manufacturing Co., New York, N. Y., steel lifesaving net, type No. 6M-L.

Ring life buoys.

Seaway Manufacturing Co., New Orleans, La., 30-inch balsa wood ring life buoy (drawing No. S. R.-B-30, dated Nov. 2, 1942) (Approval No. B-175).

Water lights.

A. E. F. Water Light Corporation, New York, N. Y., automatic floating electric water light (drawing No. A). [The A. E. F. Water Light Corporation superseded the Contour-A-Form Equipment Co.]

Delta Electric Co., Marion, Ind., Delta automatic floating electric water light, type A-2051 (drawing No. A-2051, dated Sept. 26, 1942).

Gas mask.

Davis Emergency Equipment Co., Inc., Newark, N. J., gas mask No. BM-1408 (BM-1408 cannister, BM-1408F face piece, and BM-1408 cannister harness) (approved for use against ammonia vapors only).

Fire extinguisher.

Dugas Engineering Corporation, Chicago, Ill., DuGas models 15M and 30M dry chemical carbon dioxide, cartridge-type fire extinguishers.

Daytime distress signals (smoke signals).

Van Karner Chemical Arms Corporation, New York, N. Y., V-K Mark 1 daytime distress signal.

APPROVAL NUMBERS FOR STANDARD LIFESAVING DEVICES

The name of Kirk Hayes & Co., 5344 College Avenue, Oakland, Calif., manufacturer of standard life preservers assigned approval Nos. A-229 to A-234, inclusive, and standard ring life buoys assigned approval Nos. A-235 to A-238, inclusive, listed in the November 1942 Coast Guard Bulletin, page 58, has been changed to Hayes Manufacturing Co., 1723 Fruitvale Avenue, Oakland, Calif. The Hayes Manufacturing Co. superseded Kirk Hayes & Co.

ITEMS EXAMINED BY THE MERCHANT MARINE INSPECTION SECTION AND FOUND SUITABLE FOR MARINE USE

ELECTRICAL APPLIANCES

Running light panels.

Cole Electric Products Co., Inc., 4300 Crescent Street, Long Island City, N. Y., running light indicator panel (drawing No. N–258, alteration 2).

Edwards & Co., Inc., Norwalk, Conn., automatic running light telltale panel with dripproof case, showing one master and three running-light circuits (plan 6761–GL, alteration 1, cat. No. MD–2259 N. W. T.).

Bells.

Edwards & Co., Inc., Norwalk, Conn., watertight buzzer, 20 volts and 115 volts for direct current, and 115 volts for alternating current (plan 6740, alteration 5, cat. No. 1740–S); watertight bell, 3-inch, 20 volts and 115 volts for direct current, 115 volts for alternating current (plan 5367G, alteration 6, cat. No. 1740–S); watertight bells, 4-inch, 6-inch, 8-inch, 20 volts and 115 volts direct current, 115 volts alternating current (plan 5367M, alteration 6, cat. No. 1740–S).

Oceanic Electric Products Corporation, 145 John Street, New York, N. Y., weatherproof and watertight 6-inch bell (drawing No. 2391, sheets 1, 2, and 3). This bell may be installed in any location except where explosionproof equipment is required for the period of the unlimited national emergency only.

AFFIDAVITS

Flanges.

John S. Bowes, Portland, Oreg.
Cornish Laboratories, Berkeley, Calif.
Grant Oil Tool Co., Los Angeles, Calif.
Harrisburg Steel Corporation, Harrisburg, Pa.
Ladish Drop Forge Co., Cudahy, Wis.
Skagit Steel & Iron Works, Sedro-Woolley, Wash.
Tube-Turns, Inc., 224 East Broadway, Louisville, Ky.

Steel pipe and steel castings.

Pipe & Tube Products, Inc., Jersey City, N. J.

Valves.

Hunt Tool Co., Houston, Tex.
Kiowa Corporation, Marshaltown, Iowa.
Matson Navigation Co., San Francisco, Calif.
Regan Forge & Engineering Co., San Pedro, Calif.
Roberts Brass Works, Inc., 405 East Ninety-first Street, New York, N. Y.

WELDING PROCESS

Oxy-acetylene welding process.

Hickinbotham Bros., Banner Island, Stockton, Calif., certificate No. P–31.

AMENDMENTS TO THE INSPECTION AND NAVIGATION REGULATIONS

There was published in the Federal Register during the period from February 17 to March 17, 1943, the following enumerated material which concerned the activities of the Coast Guard. Reprints are not available for distribution to the public but copies of the Federal Register are obtainable from the Superintendent of Documents, Government Printing Office, Washington, D. C.

Publication date	Subject	Title and parts amended
Feb. 18	Investigations of accidents and casualties, temporary wartime rules.	Title 46, part 136.
Feb. 26	Security of ports and control of vessels, etc.; licensing of Great Lakes vessels, United States—Canada.	Title 33, Part 6.
Mar. 2	Amendments to regulations; approval of equipment	Title 46, parts 25, 26, 55, 153.
Mar. 2	Miscellaneous amendments to pilot rules for inland waters, Great Lakes, and rivers.	Title 33, parts 304, 312, 322, 323, 332.
Mar. 13	Security of ports and control of vessels in navigable waters of United States, miscellaneous amendments.	Title 33, part 6.

U. S. GOVERNMENT PRINTING OFFICE: 1943